

Title (en)

HEADPHONE SPEAKER SYSTEM WITH INNER-EAR AND OVER-THE-EAR SPEAKERS

Title (de)

KOPFHÖRERLAUTSPRECHERSYSTEM MIT IN-EAR- UND OVER-EAR-LAUTSPRECHERN

Title (fr)

SYSTÈME DE HAUT-PARLEUR DE CASQUE AUDIO ÉQUIPÉ DE HAUT-PARLEURS INTRA ET SUPRA-AURICULAIRES

Publication

EP 3766258 B1 20220831 (EN)

Application

EP 19768125 A 20190228

Priority

- US 201862642275 P 20180313
- US 2019020012 W 20190228

Abstract (en)

[origin: WO2019177782A1] A headphone speaker system includes over-the-ear speakers (left and right) and inner-ear speakers (left and right). The left over-the-ear speaker and the right over-the-ear speaker are configured to receive a left surround audio channel of an audio signal and a right surround audio channel of the audio signal, respectively, from a surround sound processor, and are configured to be positioned outside a left ear canal of a user and outside a right ear canal of the user, respectively. The left inner-ear speaker and the right inner-ear speaker are configured to receive a left front audio channel of the audio signal and a right front audio channel of the audio signal, respectively, from the surround sound processor, and are configured to be positioned at least partially within the left ear canal of the user and at least partially within the right ear canal of the user, respectively.

IPC 8 full level

H04R 1/10 (2006.01); **H04R 5/033** (2006.01)

CPC (source: EP US)

H04R 1/1008 (2013.01 - EP); **H04R 1/1016** (2013.01 - EP); **H04R 1/1075** (2013.01 - US); **H04R 5/033** (2013.01 - US);
H04R 1/1075 (2013.01 - EP); **H04R 5/033** (2013.01 - EP); **H04R 2201/107** (2013.01 - EP US); **H04R 2205/022** (2013.01 - EP US);
H04R 2205/024 (2013.01 - US); **H04R 2420/07** (2013.01 - US)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

WO 2019177782 A1 20190919; EP 3766258 A1 20210120; EP 3766258 A4 20211215; EP 3766258 B1 20220831; JP 2021516900 A 20210708;
JP 7256201 B2 20230411; US 11166095 B2 20211102; US 2021058696 A1 20210225

DOCDB simple family (application)

US 2019020012 W 20190228; EP 19768125 A 20190228; JP 2020545349 A 20190228; US 201916980291 A 20190228